REMARKS

This is a full and timely response to the Final Office Action mailed by the U.S. Patent and Trademark Office on October 23, 2008. Upon entry of the attached amendments, claims 1-12, 15, 18-21, 24, 25, and 28-31 are pending in the application. Claims 13, 14, 16, 17, 22, 23, 26, and 27 are cancelled. Claims 1, 9, 18, and 24 are amended. Support for the amendments to claims 1, 9, 18, and 24 can be found in FIGs. 4 and 5 and the related detailed description of Applicants' original specification from at least paragraph [0042] to paragraph [0054] (in the application as published). Consequently, no new matter is added to the present application.

The following remarks address each rejection. Accordingly, reconsideration and allowance of the application and presently pending claims 1-12, 15, 18-21, 24, 25, and 28-31 are respectfully requested.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1, 9, 18, and 24 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Concerning claims 9 and 18, the Office Action alleges that the specification does not contain any teaching of "applying each vector to an adder element and to a scaler, wherein an output of the adder element is substantially equal in amplitude to an output of the scaler." The Office Action further indicates that paragraph [0052] of the specification teaches that the vectors combined in the adder element are equal in magnitude and the vectors in the scaler are equal in magnitude. In addition, the Office Action states, "[n]othing in the paragraph states that the outputs of the adder and the scaler are equal to 'each other'."

Regarding claims 1 and 24, the Office Action alleges that the specification does not contain any teaching of "a scaler configured to receive the first and second inputs and attenuate the amplitude of each of the same to generate a scaler output that is substantially equal in magnitude to the adder output." The Office Action includes a reiteration that the specification only teaches the vectors combined in the adder element as equal in magnitude and the vectors combined in the scaler element as equal in magnitude.

Applicants respectfully traverse the rejection of claims 1, 9, 18, and 24 under 35 USC

§ 112, first paragraph.

First, Applicants traverse the statement in the Office Action that indicates that vectors are combined in the scaler element. The scaler element 430 receives four vectors from the amplitude matched signal generator 300 on respective connections 352, 354, 356, and 358. The vector on connection 352 is a reference vector. A second vector on connection 354 is equal in magnitude and shifted in phase by 90° from the reference vector. A third vector on connection 356 is equal in magnitude to the reference vector and the second vector and shifted in phase by 180° from the reference vector. A fourth vector on connection 358 is equal in magnitude to the reference vector, the second vector, and the third vector and is shifted in phase by 270° from the reference vector. The scaler 430 applies a factor of $\sqrt{2}$ to each of the four vectors. Consequently, the vectors on connections 432, 434, 436, and 438 at the output of the scaler 430 are adjusted in magnitude by a factor of $\sqrt{2}$. The factor of $\sqrt{2}$ does not include an imaginary component. Accordingly, no vectors are combined in the scaler 430.

In accordance with the Manual of Patent Examining Procedure, (Section 2164.01 Test of Enablement):

> Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde,* 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. *In re Wands,* 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term "undue experimentation," it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands,* 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). See also *United States v. Telectronics, Inc.,* 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation."). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner,* 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v.*

Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). Determining enablement is a question of law based on underlying factual findings. *In re Vaeck*, 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991); *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984).

Accordingly, the test for enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent (application) coupled with information known in the art without undue experimentation.

Applicants' original FIG. 5 includes an adder element 402 with four inputs and four outputs. The four inputs are coupled to the amplitude matched signal generator 300, which provides four vectors on connections 352, 354, 365 and 358 that are substantially equal in magnitude and offset in phase from each other. A reference vector (0°) is applied on connection 352. A second vector (90°) is applied on connection 354. A third vector (180°) is applied on connection 356. A fourth vector (270°) is applied on connection 358. As explained in paragraph [0054] of the published patent application, when the 90° offset vectors are combined in the adder element 402 the resulting 45°, 135°, 225°, and 315° vectors are not equal in magnitude to the original 0°, 90°, 180°, and 270° vectors supplied by the matched signal generator. As shown in FIG. 5 and explained in paragraph [0054], when the magnitude of the original 0°, 90°, 180°, and 270° vectors supplied by the matched signal generator are each equal to 1, the vectors on connections 412, 414, 416, and 418, exiting the adder element 402, will have a magnitude of $\sqrt{2}$. As further shown in FIG. 5 and explained in paragraph [0054], the original 0°, 90°, 180°, and 270° vectors supplied by the matched signal generator 300 are each applied to a respective input of a scaler 430 that scales the vectors on connections 352, 354, 356, and 358 by a factor of $\sqrt{2}$.

Applicants respectfully submit that one reasonably skilled in the art could determine from FIG. 5 and the original specification that the magnitude of the vectors at 45°, 135°, 225°, and 315°, exiting the adder element 402, on connections 412, 414, 416 and 418, respectively, is $\sqrt{2}$ x the magnitude of the vectors exiting the amplitude matched signal generator 300. Applicants further submit that one reasonably skilled in the art could determine from FIG. 5

and the original specification that the magnitude of the vectors at 0°, 90°, 180° and 270°, exiting the scaler 430, on connections 432, 434, 436, and 438, respectively, is $\sqrt{2}$ x the magnitude of the vectors exiting the amplitude matched signal generator 300. Accordingly, the four vectors exiting the adder element 402 and the four vectors exiting the scaler 430 are equal in magnitude to each other.

Claim 1, as amended, includes "a set of scaler outputs that are substantially equal in magnitude to the adder outputs." A set of scaler outputs that are substantially equal in magnitude to the adder outputs is clearly supported by four vector outputs with a magnitude of $\sqrt{2}$ x exiting a scaler and a set of four vector outputs exiting an adder having a magnitude of $\sqrt{2}$ x.

Claim 9, as amended, includes "wherein an output of the adder element is substantially equal in amplitude to an output of the scaler." The phrase, an output of the adder element is substantially equal in amplitude to an output of the scaler, is clearly supported by four vector outputs with a magnitude of $\sqrt{2}$ x exiting a scaler and a set of four vector outputs exiting an adder having a magnitude of $\sqrt{2}$ x.

Claim 18, as amended, includes "wherein an output of the adder element is substantially equal in amplitude to an output of the scaler." The phrase, an output of the adder element is substantially equal in amplitude to an output of the scaler, is clearly supported by four vector outputs with a magnitude of $\sqrt{2}$ x exiting a scaler and a set of four vector outputs exiting an adder having a magnitude of $\sqrt{2}$ x.

Claim 24, as amended, includes "a scaler configured to receive the vectors associated with each output node and attenuate the amplitude of each of the same to generate a set of scaler outputs that are substantially equal in magnitude to the adder outputs." The phrase, a set of scaler outputs that are substantially equal in magnitude to the adder outputs, is clearly supported by four vector outputs with a magnitude of $\sqrt{2}$ x exiting a scaler and a set of four vector outputs exiting an adder having a magnitude of $\sqrt{2}$ x.

Accordingly, Applicants respectfully submit that the originally filed specification and figures enable the subject matter of claims 1, 9, 18, and 24 as required under 35 U.S.C. § 112,

first paragraph. Thus, Applicants request that the rejection of claims 1, 9, 18, and 24 under 35 USC § 112, first paragraph be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1-5, 9, 10, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,396,345 to Dolman *et al.* (hereafter *Dolman*) in view of U.S. Patent No. 7,123,897 to Gorcea *et al.* (hereafter *Gorcea*) in further view of U.S. Patent No. 5,963,607 to Romano *et al.* (hereafter *Romano*).

Claims 24, 25, and 28 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,485,358 to Andren *et al.* (hereafter *Andren*), *Gorcea*, and *Dolman* in view of *Romano*.

Claims 6-8, 11, 12, 15, and 20-21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Dolman*, *Romano* and *Gorcea* in view of U.S. Patent No. 5,912,926 to Koenck *et al.* (hereafter *Koenck*).

Claims 29-31 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Dolman*, *Gorcea*, *Romano*, and *Andren* in view of *Koenck*.

For a claim to be properly rejected under 35 U.S.C. § 103, the Examiner should set forth in the Office Action the relevant teachings of the prior art relied upon, the difference or differences in the claim over the applied reference(s), the proposed modification necessary to arrive at the claimed subject matter and an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made. It is well settled law that a *prima facie* case of obviousness must teach or suggest all the claimed limitations.

Regarding the requirement to teach or suggest all the claim limitations, MPEP § 2143.03 states "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). 'All words in a claim must be considered in judging the patentability of that claim against the prior art.' *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. § 103,

then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants' independent claims 1, 9, 18, and 24, as amended, each include elements and features that are not disclosed, taught or suggested by the proposed combination of *Dolman*, *Gorcea* and *Romano*.

Claims 1-5

Without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicants respectfully submit that the asserted combination does not disclose, teach or suggest Applicants' claimed filter arrangement.

Applicants' claim 1, as amended, is directed to a system for generating amplitude matched, phase-shifted signals. The system comprises "an adder element arranged to receive the first pair of vectors and the second pair of vectors and configured to add respective vectors from the first and second pair of vectors each shifted in phase by approximately 90° from the other vector to generate corresponding adder outputs shifted in phase from the phase of the respective vectors from the first and second pair of vectors," and "a scaler configured to receive the vectors associated with each output node and attenuate the amplitude of each of the same to generate a set of scaler outputs that are substantially equal in magnitude to the adder outputs," among other features.

The proposed combination does not disclose, teach or suggest at least Applicants' claimed adder element and scaler. The Office Action admits that the combination of *Dolman* and *Gorcea* does not teach an adder element and a scaler. (See Office Action, page 4, second paragraph.) *Romano* is introduced for the alleged teaching of an adder element and a scaler.

Figure 6 of Romano shows a chirp tracker of a direct digital synthesizer. The chirp tracker includes a first phase scaler 38 coupled to a first input of an adder 40. A second input of the adder 40 is coupled to a second phase scaler 42. The first phase scaler 38 is coupled to a frequency tracker accumulator 32. The frequency tracker accumulator 32 generates an output signal $\left(\dfrac{A}{B}\right)S$, which represents the received frequency value for each tracker clock

signal. Accordingly, the first phase scaler 38 receives a measure of frequency and multiplies the measure by a factor of A. The multiplied value is presented to the first input of the adder 40. The second phase scaler 42 receives a slope value from an external controller and multiplies the same by the factor ($A \cdot A - B / 2 \cdot B$). The adder 40 combines the values on the first and second input terminals and generates an output signal representing the phase progression increment value of a phase tracker accumulator 36.

Romano does not remedy the failure of *Dolman* and *Gorcea* to disclose, teach or suggest Applicants' claimed adder element. As shown above, the adder 40 disclosed in *Romano* is a device that receives a measure of frequency at one input and a measure of slope at another input and generates a phase progression increment value for a phase tracker accumulator 36.

In contrast with *Romano*, Applicants' claimed adder element is "arranged to receive the first pair of vectors and the second pair of vectors and configured to add respective vectors from the first and second pair of vectors each shifted in phase by approximately 90° from the other vector to generate corresponding adder outputs shifted in phase from the phase of the respective vectors from the first and second pair of vectors." Thus, Applicants' claimed adder element is not disclosed, taught or suggested by the adder illustrated and described in *Romano*. For at least this first reason, Applicants respectfully submit that the proposed combination does not render Applicants claim 1, as amended, obvious in view of the proposed combination.

In addition, *Romano* does not remedy the failure of *Dolman* and *Gorcea* to disclose, teach or suggest Applicants' claimed scaler. As shown above, a first phase scaler 38 receives a measure of frequency and multiplies the measure by a factor of A. A second phase scaler 42 receives an indication of slope and multiplies the same by a factor of ($A \cdot A - B / 2 \cdot B$).

In contrast with *Romano*, Applicants' claimed scaler is "configured to receive the vectors associated with each output node and attenuate the amplitude of each of the same to generate a set of scaler outputs that are substantially equal in magnitude to the adder outputs." Thus, Applicants' claimed scaler is not disclosed, taught or suggested by either of the first phase scaler or the second phase scaler illustrated and described in *Romano*. For at least this

second reason, Applicants respectfully submit that the proposed combination does not render Applicants claim 1, as amended, obvious in view of the proposed combination.

For at least the reasons indicated above, the proposed combination fails to disclose, teach, or suggest all elements of Applicants' claimed system, as amended. Accordingly, the proposed combination fails to establish a *prima facie* case of obviousness of Applicants' claimed system and the rejection of claim 1 under 35 U.S.C. § 103(a) should be withdrawn.

Applicants respectfully submit that dependent claims 2-5, which depend directly or indirectly from allowable independent claim 1, are allowable for at least the reason that they depend from allowable independent claims. *In re Fine,* 837 F.2d 1071, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1998). Consequently, the rejection of claims 2-5 under 35 U.S.C. § 103(a) should also be withdrawn.

Claims 9 and 10

Without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicants respectfully submit that the asserted combination does not disclose, teach or suggest Applicants' claimed method.

Applicants' claim 9, as amended, is directed to a method for generating amplitude matched, phase-shifted signals. The method comprises the steps of "generating a first peak signal responsive to a first pair of vectors that are approximately 180° different in phase from each other," "generating a second peak signal responsive to a second pair of vectors different from the first pair of vectors, the second pair of vectors approximately 180° different in phase from each other," and "generating a feedback signal responsive to the first peak signal and the second peak signal," among other steps.

The proposed combination of *Dolman, Gorcea,* and *Romano* does not disclose, teach or suggest Applicants' claimed method because the proposed combination is entirely silent regarding each of the steps cited above. Specifically, the proposed combination does not disclose, teach or suggest at least the steps of "generating a first peak signal responsive to a first pair of vectors that are approximately 180° different in phase from each other," "generating a second peak signal responsive to a second pair of vectors different from the first

pair of vectors, the second pair of vectors approximately 180° different in phase from each other," and "generating a feedback signal responsive to the first peak signal and the second peak signal." Accordingly, for at least these reasons, the proposed combination fails to establish a *prima facie* case of obviousness of Applicants' claimed method and the rejection of claim 9 under 35 U.S.C. § 103(a) should be withdrawn.

Applicants respectfully submit that dependent claim 10, which depends directly from allowable independent claim 9, is allowable for at least the reason that claim 10 depends from allowable independent claim 9. *In re Fine, supra.* Consequently, the rejection of claims 9 and 10 under 35 U.S.C. § 103(a) should also be withdrawn.

Claims 18 and 19

Without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicants respectfully submit that the asserted combination does not disclose, teach or suggest Applicants' claimed system.

Applicants' claim 18, as amended, is directed to a system for generating amplitude matched, phase-shifted signals. The system comprises "means for generating a first peak signal responsive to a first pair of vectors that are approximately 180° different in phase from each other," "means for generating a second peak signal responsive to a second pair of vectors different from the first pair of vectors, the second pair of vectors approximately 180° different in phase from each other," and "means for generating a feedback signal responsive to the first peak signal and the second peak signal," among other features.

The proposed combination of *Dolman*, *Gorcea*, and *Romano* does not disclose, teach or suggest Applicants' claimed system because the proposed combination is entirely silent regarding each of the above features. Specifically, the proposed combination does not disclose, teach or suggest at least "means for generating a first peak signal responsive to a first pair of vectors that are approximately 180° different in phase from each other," "means for generating a second peak signal responsive to a second pair of vectors different from the first pair of vectors, the second pair of vectors approximately 180° different in phase from each other," and "means for generating a feedback signal responsive to the first peak signal

and the second peak signal." Accordingly, for at least these reasons, the proposed combination fails to establish a *prima facie* case of obviousness of Applicants' claimed method and the rejection of claim 9 under 35 U.S.C. § 103(a) should be withdrawn.

Applicants respectfully submit that dependent claim 19, which depends directly from allowable independent claim 18, is allowable for at least the reason that claim 19 depends from an allowable independent claim. *In re Fine, supra.* Consequently, the rejection of claim 19 under 35 U.S.C. § 103(a) should also be withdrawn.

Claims 24, 25, and 28

Without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicants respectfully submit that the asserted combination does not disclose, teach or suggest Applicants' claimed system.

Applicants' claim 24, as amended, is directed to a system for generating amplitude matched, phase-shifted signals in a portable transceiver. The system comprises "an adder element arranged to receive the first pair of vectors and the second pair of vectors and configured to add respective vectors from the first and second pair of vectors, wherein each respective vector is shifted in phase from the other to generate respective adder outputs shifted in phase from the phase of the first pair of vectors and the second pair of vectors," and "a scaler configured to receive the vectors associated with each output node and attenuate the amplitude of each of the same to generate a set of scaler outputs that are substantially equal in magnitude to the adder outputs."

The proposed combination does not disclose, teach or suggest at least Applicants' claimed adder element and scaler. The Office Action admits that the combination of *Dolman*, *Andren*, and *Gorcea* does not teach an adder element and a scaler. (See Office Action, page 10, fourth paragraph to page 11, first paragraph.) *Romano* is introduced for the alleged teaching of an adder element and a scaler.

Romano does not remedy the failure of *Dolman*, *Andren*, and *Gorcea* to disclose, teach or suggest Applicants' claimed adder element. Figure 6 of *Romano* shows a chirp tracker of a direct digital synthesizer. As shown above, the adder 40 disclosed in *Romano* is a

device that receives a measure of frequency at one input and a measure of slope at another input and generates a phase progression increment value for a phase tracker accumulator 36.

In contrast with *Romano*, Applicants' claimed adder element is "arranged to receive the first pair of vectors and the second pair of vectors and configured to add respective vectors from the first and second pair of vectors, wherein each respective vector is shifted in phase from the other to generate respective adder outputs shifted in phase from the phase of the first pair of vectors and the second pair of vectors." Thus, Applicants' claimed adder element is not disclosed, taught or suggested by the adder illustrated and described in *Romano*. For at least this first reason, Applicants respectfully submit that the proposed combination does not render Applicants claim 24, as amended, obvious in view of the proposed combination.

In addition, *Romano* does not remedy the failure of *Dolman*, *Andren*, and *Gorcea* to disclose, teach or suggest Applicants' claimed scaler. As shown above, a first phase scaler 38 receives a measure of frequency and multiples the measure by a factor of *A*. A second phase scaler 42 receives an indication of slope and multiplies the same by a factor of ($A \cdot A - B / 2 \cdot B$).

In contrast with *Romano*, Applicants' claimed scaler is "configured to receive the vectors associated with each output node and attenuate the amplitude of each of the same to generate a set of scaler outputs that are substantially equal in magnitude to the adder outputs." Thus, Applicants' claimed scaler is not disclosed, taught or suggested by either of the first phase scaler or the second phase scaler illustrated and described in *Romano*. For at least this second reason, Applicants respectfully submit that the proposed combination does not render Applicants' claim 24, as amended, obvious in view of the proposed combination.

For at least the reasons indicated above, the proposed combination fails to disclose, teach, or suggest all elements of Applicants' claimed system, as amended. Accordingly, the proposed combination fails to establish a *prima facie* case of obviousness of Applicants' claimed system and the rejection of claim 24 under 35 U.S.C. § 103(a) should be withdrawn.

Applicants respectfully submit that dependent claims 25 and 28, which depend directly or indirectly from allowable independent claim 24, are allowable for at least the reason that they depend from allowable independent claims. *In re Fine,* 837 F.2d 1071, 5

USPQ 2d 1596, 1598 (Fed. Cir. 1998). Consequently, the rejection of claims 25 and 28 under 35 U.S.C. § 103(a) should also be withdrawn.

Claims 6-8, 11, 12, 15, 20, and 21

Without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicants respectfully submit that the asserted combination does not disclose, teach or suggest the subject matter of Applicants' dependent claims 6-8, 11, 12, 15, and 20-21.

As shown above, Applicants' independent claims 1, 9, and 18, as amended, each include elements that are not disclosed, taught or suggested by the combination of *Dolman*, *Romano*, and *Gorcea*. *Koenck* is cited for its alleged disclosure of various features of claims 6-8, 11, 12, 15, and 20-21 other than the aforementioned features missing from *Dolman*, *Romano*, and *Gorcea*. Applicants respectfully submit that *Koenck* does not add anything to the combination of *Dolman*, *Romano*, and *Gorcea* that would remedy the aforementioned deficiencies.

Thus, the proposed combination of *Dolman*, *Romano*, *Gorcea* and *Koenck* does not disclose, teach or suggest Applicants' claimed systems and methods. Accordingly, the proposed combination fails to establish a *prima facie* case of obviousness for at least the reason that the combined teachings of *Dolman*, *Romano*, *Gorcea* and *Koenck* do not teach all features of dependent claims 6-8, which depend from independent claim 1, dependent claims 11, 12, and 15, which depend from independent claim 9, and dependent claims 20 and 21, which depend from claim 18.

Accordingly, favorable reconsideration and withdrawal of the rejection of dependent claims 6-8, 11, 12, 15, 20, and 21 under 35 U.S.C. § 103 are respectfully requested.

Claims 29-31

Without conceding the propriety of the asserted combination or whether one of ordinary skill would have been motivated to make the asserted combination for the alleged reasons, Applicants respectfully submit that the asserted combination does not disclose, teach

or suggest all elements of Applicants' amended independent claim 24, from which dependent claims 29-31 depend.

As shown above, Applicants' independent claim 24, as amended, includes elements that are not disclosed, taught or suggested by the combination of *Dolman*, *Gorcea*, *Romano* and *Andren*. *Koenck* are cited for their alleged disclosure of various features of claims 29-31 other than the aforementioned features missing from the combination of *Dolman*, *Gorcea*, *Romano*, and *Andren*. Applicants respectfully submit that *Koenck* does not add anything to the disclosure of *Dolman*, *Gorcea*, *Romano*, and *Andren* that would remedy the aforementioned deficiencies.

Thus, the proposed combination of *Dolman*, *Gorcea*, *Romano*, *Andren*, and *Koenck* does not disclose, teach or suggest Applicants' claimed system. Accordingly, the proposed combination fails to establish a *prima facie* case of obviousness for at least the reason that the combined teachings of *Dolman, Gorcea, Romano, Andren*, and *Koenck* do not teach all features of dependent claims 29-31, which depend from independent claim 24.

Accordingly, favorable reconsideration and withdrawal of the rejection of dependent claims 29-31 under 35 U.S.C. § 103 are respectfully requested.

CONCLUSION

In summary, Applicants respectfully submit that presently pending claims 1-12, 15, 18-21, 24, 25, and 28-31 are allowable and the present application is in condition for allowance. Accordingly, a Notice of Allowance is respectfully solicited. Should the Examiner have any comments regarding the Applicants' response or intends to dispose of this matter in a manner other than a Notice of Allowance, Applicants request that the Examiner telephone Applicants' undersigned attorney.

Respectfully submitted,

**SMITH FROHWEIN TEMPEL
GREENLEE BLAHA LLC
Customer No.: 35856**

By: /Robert A. Blaha/
Robert A. Blaha
Registration No. 43,502
(770) 709-0069